

Implementing a Sentinel Surveillance System for Ongoing and Continuous Monitoring of PPE Usage in U.S. Healthcare Workers

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Goal

- This study will identify, describe and evaluate surveillance systems currently in use in a medical center setting to track activities, resources and outcomes related to PPE used for an airborne respiratory event.

Objectives

- Document the evaluation and monitoring of respirators as part of a large hospital's preparation for an airborne infectious disease event. The entire usage cycle, including selection, defects/recalls, supply, training and effectiveness will be described.
- Describe the process needed to monitor the operational components during a sentinel event.
- Identification of data collection points to be used in a PPE monitoring system.
- Develop a Best Practices document to ensure hospitals are better prepared for a Pandemic Airborne Disease Event, natural or man-made.



Stakeholders

- Healthcare Workers
- Manufacturers
- Hospitals
- Clinics

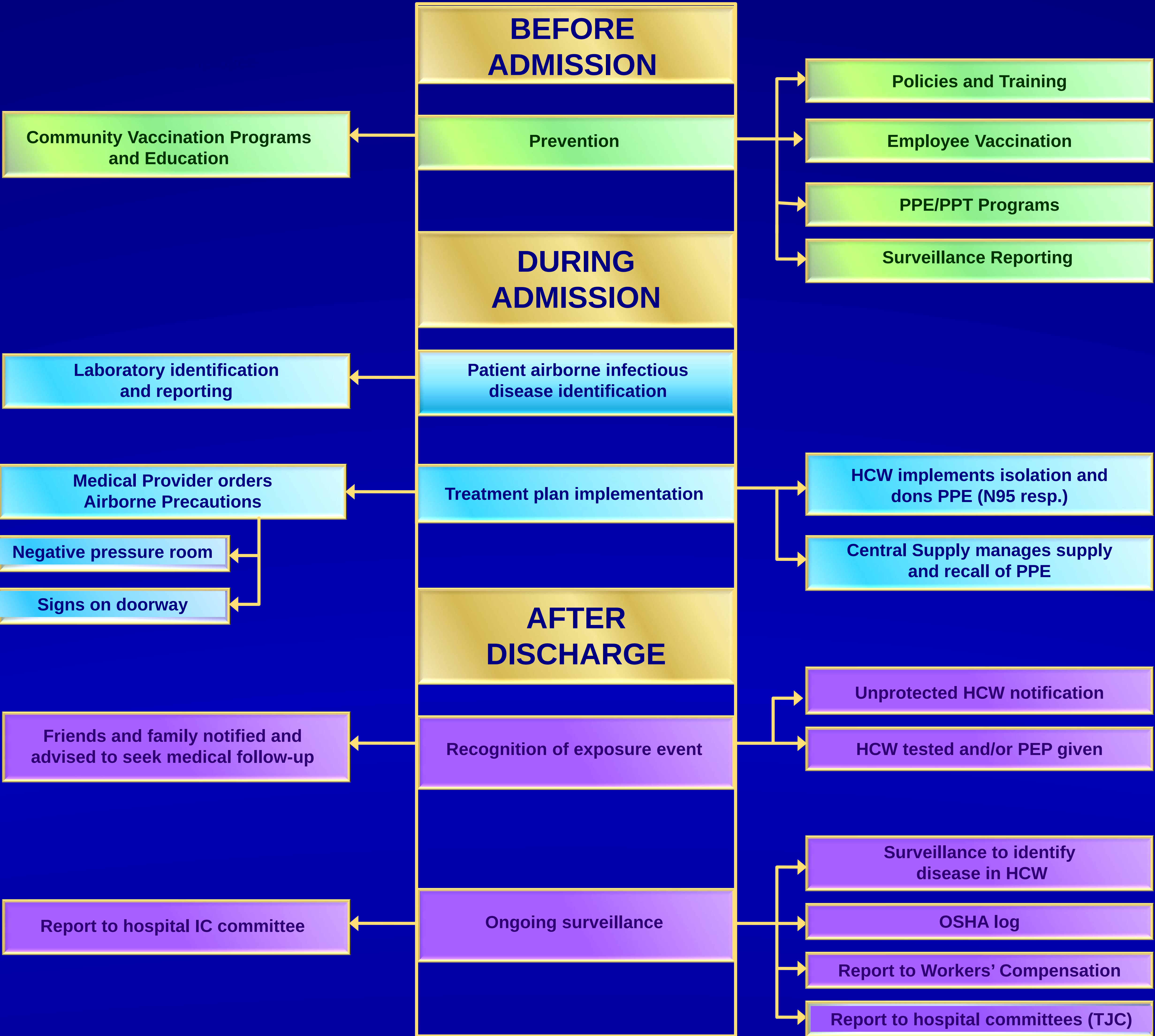
Ongoing Study: Describing the Vanderbilt Surveillance System

- The Vanderbilt Health and Wellness Department has established a database, the *Vanderbilt Occupational Health Information System* (VOHIS), to provide information tracking related to health and safety programs.
- The VOHIS allows Vanderbilt the ability to track programs, resources and outcomes required by legislated or mandated programs.

Source Patient Surveillance

VUMC

Health Care Worker Surveillance



Clinic Management Strategy

- Mission specific occupational programs & related services based on workplace hazards
- Group hazards by event
 - Surveillance: hazards of specific job
 - Exposures: contact occurs with unsafe level
 - Worker's Comp: injury or illness related to contact
 - Acute Care: question of ability to work
 - Training: education
- Services related to specific hazards
- Interface with related programs



Scope

- Federal, State, or Employer Mandated
 - OSHA regulations
 - TOAHA standards
 - Worker's Compensation legislation
 - FMLA
 - ADA
 - Workplace policies designed to protect health

Managed Surveillance

- Algorithms consider hazards associated with each job
- Determines who, what, where, when, and why
- Assigns services
- Record service results
- Interface with related programs
- Report compliance

Efforts in Development

- Gather information on systems and the types of data used to manage PPE surveillance.
- Document and identify the resources and outcomes related to surveillance operations used at VUMC.
- Gather data related to PPE types, suppliers and costs, along with information about recalls. Survey HCW to determine factors related to use, comfort and beliefs about the N-95 respirator.
- Share data with NIOSH for the purpose of statistical analysis of the effectiveness of disease prevention and the quality of PPE.
- Use the data analyzed to establish "Best Practices" for health care facilities.